PSC REF#:109287

Public Service Commission of Wisconsin

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Public Service Commission of Wisconsin
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VIA ELECTRONIC MAIL

March 23, 2009

Scott R. Smith
Wisconsin Power and Light Company
PO Box 77007
Madison WI 53707-1007

Re: Application of Wisconsin Power and Light Company and Wisconsin Electric Power Company for a Certificate of Authority to Install a Selective Catalytic Reduction System for NOx Removal on Unit 5 at the Edgewater Generating Station, Sheboygan County, Wisconsin. 05-CE-137

Dear Mr. Smith:

Public Service Commission (Commission) staff has the following data requests regarding Wisconsin Power and Light Company's (WP&L) supplemental application in the docket listed above:

03.01 p. 12, par 3: Provide discussion on why WPL is not pursuing environmental trust financing.

03.02 p.18 par. 2: Provide updated discussion on CAIR.

03.03 p.18 par. 3: Provide BART analysis submitted to DNR.

03.04 p. 25 Table 4 footnote: Does the table include the full share of Edgewater 4?

03.05 p. 29 par. 4: Provide update on the need for fan modifications and if the costs of such are included in the total cost.

03.06 Follow-up to Question 1.12: As an alternative to meeting Phase II RACT requirements, can Unit 3 be retired to allow higher NOx output from Unit 4 and 5? Must the average heat input for Edgewater 3 be changed to 0 in the calculations if any unit is retired?

03.07 Follow-up to Question 1.12: p. 1, par. 3: Provide a copy of the independent engineering assessment referenced in which the SCR is the only feasible option toward meeting Phase II of RACT controls.

03.08 Follow-up to Question 1.12: p. 25 Table 4: Why doesn't Table 4 include an analysis of an SCR on Unit 4 and an SNCR on Unit 5?

03.09 Follow-up to Question 1.22: Should SO_2 emissions be reduced further, is there still sufficient room to install a FGD unit on Edgewater 5 if both a new baghouse and SCR

are installed? This question is being asked since Edgewater 5 will likely be the largest remaining source of uncontrolled emissions of SO_2 after 2015.

03.10 Follow-up to Question 1.22: p. 25 Table 4: Why doesn't Table 4 include an analysis of an SCR on Unit 4 and an SNCR on Unit 5? Provide discussion on an alternative of a SNCR installed on Unit 5 along with a SCR on Unit 4 and whether or not it would meet air emission requirements.

03.11 Follow-up to Question 1.22: How has the economic maximum output changed for Edgewater 3 in the past five years? Is there a maximum NOx limit (assuming an averaging period of 1 hour or greater) for Unit 3 that will not be exceeded under any circumstance? Compare response to what was provided in response to MAR-05 in 6680-FR-101.

03.12 Follow-up to Question 1.22: Is the Economic Maximum output on Edgewater 3 being dispatched into the MISO market similar to what is being modeled in EGEAS ?

03.13 Follow-up to Question 1.22: Provide discussion on the possibility of retiring Edgewater 3 to meet Phase II RACT limits.

03.14 Follow-up to Question 1.22: Does EGEAS modeling provided assume Edgewater 3 is retired?

03.15 Follow-up to the March 3, 2009, Progress Report in docket 6680-CE-162: What is the Economic Maximum load for Edgewater 3 with the SNCR/RRI in operation? Provide emission levels obtained with SNCR/RRI in service and discussion if these levels will be improved or maintained. Provide chemical injection rates and associated costs and the increase in projected O&M costs.

03.16 Follow-up to the March 3, 2009, Progress Report in docket 05-CE-114: What is the Economic maximum load for Edgewater 4 with the SNCR/RRI in operation? Provide emission levels obtained with SNCR/RRI in service and discussion if these levels will be improved or maintained. Provide chemical injection rates and associated costs and the increase in projected O&M costs.

03.17 Provide updated answer to the following question asked in the NED1, 2 FGD case: ND 01.17 Provide actual emissions in tons per year for each unit of the WP&L fleet for SOx, NOx, Hg, and CO2, by year, for the last ten years. Discuss any reasons for the variability in actual emissions. List milestones where the installation of any equipment has changed the emissions.

03.18 Provide updated answer to the following question asked in the NED1, 2 FGD case: ND 01.19 In order to better understand CAIR/CAMR requirements; provide the annual emission limits in tons for NOx, SOx, and Hg on a WP&L system basis for future years. Show how the reductions were calculated.

03.19 Provide updated answer to the following question asked in the NED1, 2 FGD case: ND 01.20 Provide emissions allowance inventories for all pollutants by year accumulated.

03.20 Provide updated answer to the following question asked in the NED1, 2 FGD case: ND 01.21 Provide estimated emissions from each unit in tons per year of the WP&L fleet for SOx, NOx, Hg, and CO_2 for the next ten years. List milestones where the installation of any equipment will impact the amounts emitted.

03.21 Provide updated answer to the following question asked in the NED1, 2 FGD case: ND 02.01 Provide the spreadsheets filed in response to that data request in MS Excel format. The versions provided in response to this request may have links to external sources converted to values, but must include all other formulae internal to the spreadsheet.

03.22 Provide updated EGEAS analysis without NED 3 and consideration of the other changes discussed during the latest technical discussion between staff and WP&L modeling experts.

03.23 Explain how fixed and variable O&M costs are modeled along with future capital expenses within EGEAS. Provide spreadsheet analysis (both paper and electronic) for all future costs modeled as Fixed and Variable expenditures in EGEAS. This should be done in a similar way for all plants with emission control additions.

Please post your responses to this request to the Commission's Electronic Regulatory Filing (ERF) system. If you have any questions regarding this request, please contact Ken Detmer at (608) 267-9509.

Sincerely,

Ken Detmer

Ken Detmer, P.E.
Engineer

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